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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,126	12/14/2001	James H. Keithly	876P146	9008
26568	7590	05/19/2005	EXAMINER	
COOK, ALEX, MCFARRON, MANZO, CUMMINGS & MEHLER LTD SUITE 2850 200 WEST ADAMS STREET CHICAGO, IL 60606			SAYALA, CHHAYA D	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,126

Applicant(s)

KEITHLY ET AL.

Examiner

C. SAYALA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-9,11,12,14-20,22-26,28,29 and 31-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,11-12,14-20,22-26,28-29 and 31-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 14-17, 32-33, 38-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims (14-17) depend from a cancelled claim.

Claim 1 has been amended to recite a citrus byproduct. Yet claim 12, which depends from it, recites a combination of by product *components*. It is unclear whether the by product components is in addition to the citrus by product of claim 1.

In claim 32, the feed supplement comprised of "hesperidin, limonin glucoside and citrus pectin" lacks antecedent basis. This is also true for claim 33.

Claims 38 and 39 recite placing citrus by product without extracting or purifying citrus by product from/in the citrus feed supplement. But claim 20 recites citrus by product particles. What do these claims mean?

Claim Rejections -35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5-9, 11-12, 14-26, 28-29, 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deyoe et al. in view of Henderson et al. (US Patent 4560561) and Moore, Jr. (US Patent 5928403).

The reference teaches feeding broilers up to 2.5% bioflavanoids.

Bioflavonoids are inherently present in citrus peels or any citrus byproduct, and is known to be a beneficial byproduct of such. (See specification). See page 1088 in the reference. The reference does not teach poultry being housed in confining spaces. However, it is well known that to produce broilers, poultry have to be housed in confining spaces, and therefore this is inherent. The reference does not show particles or that the pellet size. The specification also states that the flavonoids, food-grade acids, etc. occur naturally in citrus products.

Henderson et al. teach pellets of feed supplement that comprise citrus molasses, in a size 1/16" in diameter. Moore shows that calculating feed conversions and ammonia volatilizations are also commonplace in poultry farming. It would have been obvious to one of ordinary skill in the art to extend such teachings in order to make such calculations, shown by prior art, when Deyoe is applied to poultry raising. To optimize particle feed size is also within the ambit of the skilled worker. As for the increase of HDL levels, it is well settled that a patent cannot be properly granted for [an invention] which would flow naturally from the

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teaching of the prior art. *American Infra-Red Radiant Co. v. Lambert Indus., Inc.*, 360 F.2d 977, 986 [149 USPQ 722 (CCPA 1958)], (8th Cir.) (quoting *Application of Libby*, 255 F.2d 412 [118 USPQ 194 (CCPA 1958)], *cert. denied*, 385 U.S. 920 [151 USPQ 757] (1966).

3. Claims 1, 3, 5-9, 11-12, 14-26, 28-29, 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boushy et al.¹ ("Poultry Feed from Waste", Chap. 6, pages 218-224, 1994) or Coleman et al.² (J. Agric. Food Chem., vol. 25(4), pages 971-73, 1977) or Eldred et al.³ (Nutr. Reports Intl., vol. 14, pages 139-145, 1976) in view of Henderson et al. (US Patent 4560561) and Moore, Jr. (US Patent 5928403).

At page 219, the reference 1 teaches up to 20% of citrus meal is beneficial. At page 221, the reference teaches that citrus pulp in levels higher than 7.5% is not beneficial to poultry. At page 222, feedstuffs comprising dried citrus pulp, for broilers at an inclusion level of 7.5% of the diet was beneficial. At page 223, citrus sludge at an amount less than 7.5% was useful when included in broiler diets.

Reference 2 teaches that broilers thrived with 0-20% dried citrus sludge, when the diet contained 7.5% or less of the sludge. See page 972, second col., last few lines.

The teaching in reference 3 is similar to reference 2. See abstract.

The references do not teach poultry being housed in confining spaces. However, it is well known that to produce broilers, poultry have to be housed in

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confining spaces, and therefore this is inherent. The reference does not show particles or that the pellet size. The specification also states that the flavonoids, food-grade acids, etc. occur naturally in citrus products. Henderson et al. teach pellets of feed supplement that comprise citrus molasses, in a size 1/16" in diameter. Moore shows that calculating feed conversions and ammonia volatilizations are also commonplace in poultry farming. It would have been obvious to one of ordinary skill in the art to extend such teachings to make such calculations and combine this with the teaching of the primary references that show that the addition of citrus by products up to 7.5% in poultry feeds is beneficial, is applied to poultry raising. To optimize particle feed size is also within the ambit of the skilled worker. As for the increase of HDL levels, it is well settled that a patent cannot be properly granted for [an invention] which would flow naturally from the teaching of the prior art. *American Infra-Red Radiant Co. v. Lambert Indus., Inc.*, 360 F.2d 977, 986 [149 USPQ 722 (CCPA 1958)], (8th Cir.) (quoting *Application of Libby*, 255 F.2d 412 [118 USPQ 194 (CCPA 1958)], cert. denied, 385 U.S. 920 [151 USPQ 757] (1966).

Response to Arguments

Applicant's arguments filed 3/3/05 have been fully considered but they are not persuasive.

The applicability of the Deyoe et al. reference has been explained in the previous Office action. The rejections are being maintained for the same reasons. The traversals in the paper filed 3/3/05 states that there is no

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information that teaches the "citrus bioflavonoids" tested according to that article are the same as the citrus byproduct particles....." In fact they are not the "same". But it is scientific knowledge that the bioflavonoids are found in citrus products in a natural state. See specification at page 11, last paragraph. See also instant claims 1 and 12. Whether the reference shows citrus products or just bioflavonoids, it suggests that bioflavonoids are useful in poultry diets, in any event. In a 35 USC 103 rejection, it is well established that a reasonable expectation of success, not absolute predictability is necessary for conclusion of obviousness, In re Longi, 225 USPQ 545, In re Morston, 1961 C.D. 330, In re Clinton, 188 USPQ 365, In re O'Farrell, 7 USPQ2d 1673, 1681 (Fed Cir 1988) .

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA whose telephone number is 571-272-1405.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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Group 1700.